

REMARKS/ARGUMENTS

While Applicants believe that the claims as originally presented are patentable over the art of record, they have nevertheless agreed to amend the claims to require less than about 100 ppm of the ultra-fine zinc oxide in the interest of expediency. Applicants reserve the right to file a divisional application to obtain protection up to 500 ppm.

Support for the above amendment can be found from the case as originally filed. In particular, support for reducing the upper limit of the content of the ultra-fine zinc oxide to 100 ppm can be found at page 3, line 2 of the original specification. The amendment to claim 1 made claim 2 superfluous, and so it was cancelled. Applicants' representative sincerely thanks the Examiner for the courtesy extended during the personal interview on November 28th. At that meeting the art of record was discussed, as well as the overall nature of the present invention as a combination of various features. Applicants' arguments regarding those records are reproduced below for the sake of providing a complete record.

The present invention requires a combination of several elements. First, at least one low density polyethylene resin must be present. Second, zinc oxide must be present. Third, the zinc oxide must be present in an amount less than 100 ppm. Fourth, the zinc oxide must have a mean particle size no greater than about 0.05 μm . And finally this composition must be formed into a stretch wrap film. None of the references cited teach this specific combination of elements.

With regards to Matteodo (US Pat. No. 5,132,344), it teaches many types of polyethylene (see col. 2, lines 63-64) including linear low density polyethylene. It requires zinc oxide, but says it should be present in an amount in a range of from 100 to less than 2,000 ppm (see col. 2, line 35), and should have a particle size of from 0.05 to 2.0 μm , preferably from 0.1 to 2.0 μm (see col. 3, line 33). Matteodo also teaches that its compositions can be thermoformed, which includes film forming processes (see column 5, lines 23-29), although stretch wrap film is not specifically mentioned.

While some of the ranges of particular elements in Matteodo may overlap with ranges claimed in the present invention there is no teaching of the specific combination of elements claimed. In particular, there is no teaching of the

combination of a small amount of zinc oxide having a small average diameter particle size. In order to arrive at an example meeting the claims of the present invention from Matteodo, it would be necessary to pick specific materials and end use applications from Matteodo's broad teachings and choose ranges of particle size and amounts which are at the extreme of the ranges taught by Matteodo, and at least for the case of particle size, outside the preferred range. It is important to note that none of the Examples of Matteodo fall within the scope of the present invention, due to using a zinc oxide with a mean diameter size of 0.5 μm (see col 6, line 9), and in amounts greater than 100 ppm. Thus there is no novelty destroying point contained in the Examples. As there is no novelty destroying point in the Examples, and no teaching of the specific combination of elements claimed in the present invention, Matteodo is relevant only for a discussion of obviousness.

In terms of obviousness, there is no indication why a person of ordinary skill in the art, considering Matteodo, would choose to select the particular combination of elements claimed in the present invention. First as to particle size, at column 3, line 33, Matteodo teaches away from using the smaller materials included in its broadest range (0.5 μm to 2 μm), indicating that the larger particles (0.1 μm to 2 μm) are more preferred. Secondly as to the amount, it is notable that at column 8, line 67, Matteodo states that using less than 100 ppm is actually worse than using none at all. Clearly this teaches away from the lower amounts now claimed by the Applicants.

The results presented in the present application demonstrate surprising results achieved when using the amounts and size of the zinc oxide particles with LLDPE. In particular Table 4 (including both 4.1 and 4.2) demonstrates that using ultra fine zinc oxide at low levels increases the cling force of stretch wrap films while maintaining other properties, including successful neutralization of acid in the resin (see Table 1). These results are unexpected, and are in no way suggested by Matteodo.

Similarly, the McKinney reference (US Pat No. 4,430,289) contains broad teachings without teaching or suggesting the specific combination claimed. McKinney teaches LLDPE together with an inorganic material which may include zinc oxide, although siliceous materials are preferred (see col. 4, lines 14-18). The

inorganic material has a particle size range of from 0.02 to about 40 μm . The inorganic material is present in an amount of from 100- 20,000 ppm with 500 to 6,000 being preferred (see col. 3, lines 38-39). Finally, while McKinney teaches that its materials may be used for films in general, it does not specifically teach stretch wrap films, and given its concern (see for example column 1, line 68 to column 2, line 2) with reducing cling or “blocking” it seems unlikely that such films would be suitable for stretch wrap.

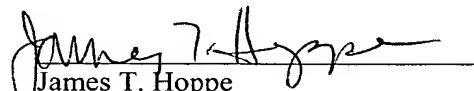
Again, it should be noted that none of the Examples recited in McKinney would fall within the scope of the claims of the present invention. As there is no novelty destroying point in the Examples, and no teaching of the specific combination of elements claimed in the present invention, McKinney is relevant only for obviousness discussion.

McKinney teaches away from the specific invention now claimed in several respects. McKinney teaches that the preferred inorganic materials are siliceous materials, and that the preferred amount is in a range above that now claimed. Moreover, McKinney teaches that the inorganic material is used to decrease blockiness or cling, whereas the present invention is a method for improving the cling force.

Accordingly as none of the references cited in the prosecution of the present case teach or suggest the specific combination now claimed, and as this combination provides the surprising results presented in the example section of the present application, the Applicants respectfully submit that the claims of the present invention are patentable over the art of record.

A notice of allowance for the present claims is therefore courteously requested.

Respectfully submitted,



James T. Hoppe
Registration No. 35,899
Phone: 979-238-9039

P. O. Box 1967
Midland, MI 48641-1967
smm